



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,052	02/13/2006	Atsushi Tanaka	0425-1193PUS1	7388

2292 7590 03/17/2008
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

STANLEY, JANE L

ART UNIT	PAPER NUMBER
----------	--------------

4145

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

03/17/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/539,052	Applicant(s) TANAKA ET AL.	
	Examiner JANE L. STANLEY	Art Unit 4145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20050915, 20060213, 20050615</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The following documents: US-3,523,797-A, US-3,746,545-A, JP-9-31394-A, JP-2003-253197-A, JP-2001-502735-A, JP-11-58319-A, and JP-2002-536534-A1, cited in the information disclosure statement filed on September 15, 2005 have been already submitted and considered as part of the information disclosure statement filed on June 15, 2005.

Claim Objections

2. **Claim 2** is objected to because of the following informalities: the claim recites "a compound represented by formula" and should instead read "a compound represented by the formula". Appropriate correction is required.

3. **Claim 4** is objected to because of the following informalities: it is unclear if the term "polyhydric alcohol" in claim 4 is referring to a portion of the "polyhydric alcohol polyglycidyl ether" of claim 3, from which it depends, or if the term is referring to a separate polyhydric alcohol compound.

If the former interpretation is the case, then claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 4 recites the term "polyhydric alcohol" which is a broader class of compounds

Art Unit: 4145

than the “polyhydric alcohol polyglycidyl ether” recited by claim 3, from which claim 4 depends.

If the latter interpretation is the case, then claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form because it does not include every limitation of the parent claim. A proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 4 recites the term “the polyhydric alcohol” rather than the “polyhydric alcohol polyglycidyl ether” recited by claim 3, from which claim 4 depends.

4. **Claim 5** is objected to because of the following informalities: the claim recites “a diglycidyl ether of ethylene glycol or polyethylene glycol” and should instead read “a diglycidyl ether of *either* ethylene glycol or polyethylene glycol”.

Furthermore, Claim 5 is objected to because of the following informalities: the claim recites “triethanol amine” and should instead read “triethanolamine”.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claim 7** is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition

of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 1, 4 and 7** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites “A detergent composition comprising a detergent and a crosslinked product obtained by reacting,” the claim is indefinite because it is unclear if it is the applicant's detergent composition that is “obtained by reacting” or if it is the crosslinked product that is “obtained by reacting”.

Claim 4 recites the limitation "polyhydric alcohol" in claim 4, line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 4 recites “polyhydric alcohol” and depends from claim 3 which recites component (b) as a “polyhydric alcohol polyglycidyl ether,” but does not recite a “polyhydric alcohol” alone.

Claim 7 provides for the use of a crosslined product to release soil from clothes, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

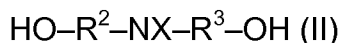
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1-7** are rejected under 35 U.S.C. 102(b) as being unpatentable over Boeckh *et al.* (WO 0109223 A1).

Regarding claim 1, Boeckh *et al.* teaches a detergent composition (zwitterionic polyamines as additives in detergents, abstract and pg 12, ln 7-15) comprising a detergent (mid-chain branched alkyl sulphonates, pg 12, ln 10-11) and a crosslinked product (zwitterionic polyamine, abstract; pg 2, ln 1-2; pg 8, ln 17-18) obtained by reacting a compound having 2 to 32 hydroxyl groups (instant component (a)) (polyamines such as di- and/or trihydroxy-C2- to C4-alkylamines, pg 5, ln 23-24 and 30-31) with a compound having at least two functional groups reacting with hydroxyl groups (instant component (b)) (crosslinker, pg 5 ln 25-26, such as polyepoxides, pg 7 ln 14).

Regarding claim 2, Boeckh *et al.* teaches the limitations as set forth above and further teaches a detergent composition wherein:

- the component (a) is a compound represented by formula (II):

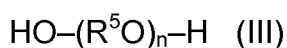


wherein R² and R³ independently represent a C2 to C3 alkylene group, X represents a hydrogen atom or a group represented by –R⁴–OH whereupon R⁴ represents a C2 to C3 alkylene group, and R², R³ and R⁴ may contain

repeated oxyethylene groups and/or oxypropylene groups (polyamines such as di- and/or trihydroxy-C2- to C4-alkylamines, pg 5, ln 23-24 and 30-31; i.e. diethanolamine, triethanolamine, etc, pg 5 ln 42-45).

Regarding claim 3, Boeckh *et al.* teaches the limitations as set forth above and further teaches a detergent composition wherein the component (b) is a polyhydric alcohol polyglycidyl ether (i.e. bisglycidyl ethers of ethylene glycol, pg 7 ln 40-41).

Regarding claim 4, Boeckh *et al.* teaches the limitations as set forth above and further teaches a detergent composition wherein the polyhydric alcohol is a compound represented by formula (III):



wherein R^5 represents a C2 to C3 alkylene group, and n is a number of 1 to 30 (i.e. polyethylene glycol, pg 7 ln 41).

Furthermore, it was known to ordinary artisans at the time of the invention that a crosslinked product wherein one of the components (in this case (b)) is comprised of bisglycidyl ethers of ethylene glycol, that the polyhydric alcohol portion of said bisglycidyl ether of ethylene glycol would inherently be ethylene glycol (a compound derivable from instant formula III).

Regarding claim 5, Boeckh *et al.* teaches the limitations as set forth above and further teaches a detergent composition wherein the component (a) is triethanol amine (triethanolamine, pg 5 ln 44) and the component (b) is a diglycidyl ether of ethylene glycol or polyethylene glycol (bisglycidyl ethers of ethylene glycol, pg 7 ln 40-41).

Regarding claim 6, Boeckh *et al.* teaches the limitations as set forth above and further teaches use of the crosslinked product as a soil release agent (clay soil removal agents, pg 1 ln 36-40; hydrophilic soil removal benefits, pg 12 ln 7-9).

Furthermore, it is noted the recitation that the crosslinked product is to be used as a soil release agent (**claim 6**) does not confer patentability to the claims since the recitation of an intended use does not impart patentability to otherwise old compounds or compositions. *In re Tuominen*, 671 F.2d 1359, 213 USPQ 89 (CCPA 1982). Furthermore, the recitation of a new intended use for an old product does not make a claim to that product patentable. *In re Schreiber*, 44 USPQ 2d 1429 (Fed. Cir. 1997).

Regarding claim 7, Boeckh *et al.* teaches the limitations as set forth above and further teaches a method of releasing soil from clothes with the crosslinked product (pg 12, ln 7-15).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Willems *et al.* (US 3,523,797) teaches a crosslinked polymeric compound used in silver halide deposition comprising alkylene(N-alkyl)-amino-alkylene groups (abstract; i.e. triethanolamine, pg 3 ln 17) linked through hydroxyl substituted oxyalkylene groups (abstract; i.e. 1,2-bis(2,3-epoxypropoxy)-ethane, pg 3 ln 3-4).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANE L. STANLEY whose telephone number is (571)270-3870. The examiner can normally be reached on Monday - Friday, 7:30 am - 5:00pm, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLS

/Basia Ridley/
Supervisory Patent Examiner, Art Unit 4145